## Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D. C. 20554

In the Matter of	)
Amendment of Parts 13 and 80 of the Commission's Rules Concerning	) ) WT Docket No. 00-48 )
Maritime Communications	)
Petition for Rule Making Filed by	) RM-9499
Globe Wireless, Inc.	)

## COMMENTS AND PETITION FOR PARTIAL RECONSIDERATION OF THE UNITED STATES COAST GUARD

The United States Coast Guard (Coast Guard or USCG) respectfully submits these Comments and Petition for Partial Reconsideration in response to the Report and Order and Further Notice of Proposed Rulemaking (Notice) RM-9499 released April 9, 2002 in the above-captioned proceeding.

## Part 1. Petition for Partial Reconsideration

- 1. Watch Requirements on Channel 16 (paras. 25-27). As noted in the Report and Order, the Federal Communications Commission (FCC or Commission) noted "that it would be premature to presume that the IMO will extend the watch date beyond February 1, 2005. Therefore extending the date beyond February 1, 2005 in our part 80 rules would be inconsistent with international standards" and accordingly, extended the watch requirement until February 1, 2005. That date was therefore inserted into 80.305(a)(3) and 80.1123. Since this text was written, however, the International Maritime Organization Maritime Safety Committee, at its 75<sup>th</sup> session, has in fact, amended the Safety of Life at Sea (SOLAS) Convention to extend this date indefinitely. We therefore request the FCC revise 80.305(a)(3) and 80.1123 accordingly, to be consistent with the decisions of the International Maritime Organization.
- **2.** Universal Shipborne Automatic Identification System (AIS) (footnote 145). In footnote 145, the Commission declined to include enabling language in its rules for AIS,

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<sup>&</sup>lt;sup>1</sup> See document MSC/75/24, available from <a href="mailto:CGComms@comdt.uscg.mil">CGComms@comdt.uscg.mil</a> upon request.

again, believing it was premature to do so since not all of the international requirements and standards for AIS had been finalized. They proposed instead to address this in PR Docket 92-257. All requirements and standards for the AIS have since been finalized<sup>2</sup>. In a letter to the Commission dated 6 May 2002<sup>3</sup>, the Coast Guard noted "the necessity to quickly expand envisioned uses of Universal Shipborne Automatic Identification System (AIS) in support of Homeland Security as well as navigation safety". While not having an opinion on whether AIS should be managed under this proceeding or PR Docket 92-257, the Coast Guard does ask that the FCC move expeditiously in this matter.

- **3. Routine calling on MF/HF DSC frequencies (para. 95).** The Commission noted the discrepancy between Sections 80.1077 and 80.359(b), and decided to amend the table at section 80.1077 to clarify that routine calling is not permitted on MF and HF DSC frequencies. Since ships do not normally keep watch on MF/HF DSC frequencies other than those described above, and since routine calling can be a necessary function of the GMDSS, the US has asked ITU to reconsider it's prohibition of routine calling on those frequencies. ITU will consider the matter at its Working Party 8B meeting in September, and decide at its World Radio Conference in June 2003. The Coast Guard requests that the FCC postpone its clarification until after ITU makes its decision on the matter, and then clarify its rules consistent with ITU's decision.
- 4. § 80.1061(c) EPIRB Certification. The Commission declined to adopt the Coast Guard's recommendation to require independent laboratories to verify compliance of EPIRBs with the RTCM standards. Currently, the Coast Guard reviews manufacturer documentation and EPIRB test reports prepared by independent laboratories prior to EPIRB authorization by the Commission. The notice cited public safety implications as the reason, and the Coast Guard accepts the Commission's rationale for not adopting the proposal. However, both the revised and previous wording of the section require that the EPIRB "must be certified by a test facility recognized by the U.S. Coast Guard to certify that the equipment complies with the U.S. Coast Guard environmental and operational requirements associated with the test procedures described in Appendix A of the RTCM Recommended Standards." The Coast Guard's proposed wording would have established a process by which the laboratory would actually certify the equipment. Under the present process, and the process envisioned by the Commission and described in paragraph 85 of the Report and Order, the laboratory conducts the testing and prepares the test report, and the Coast Guard is responsible for verifying compliance (i.e. certifying).

We therefore propose revision of the second sentence of paragraph (c) of § 80.1061, as well as revision of paragraph (c)(1) as follows:

(c) \*\*\* Additionally, the radiobeacon must be tested to the environmental and operational test procedures described in Appendix A of the RTCM Recommended Standards, by a test facility recognized by the U.S. Coast Guard. \*\*\*

<sup>3</sup> Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau.

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<sup>&</sup>lt;sup>2</sup> See USCG Navigation and Vessel Inspection Circular (NVIC) No. 8-01, dated 26 September 2001, paragraph 165.155, available from <a href="http://www.uscg.mil/hq/g-m/nvic/index00.htm">http://www.uscg.mil/hq/g-m/nvic/index00.htm</a>.

(1) After a 406.0-406.1 MHz EPIRB has been tested by the recognized test facility the following information must be submitted in duplicate to the Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street SW, Washington, DC 20593-0001:

## Part 2. Comments in response to questions by the Commission

- 5. Voluntary Restricted GMDSS License. In paragraph 110, the Commission sought "additional information on the specific nature of this or similar needs of recreational vessel operators, as well as information on what other options may be available to these operators to meet such needs". The Coast Guard fully recognizes the burden of a massive licensing scheme while also recognizing the potential for rapid degradation of the added benefit of Digital Selective Calling to the Search and Rescue process. The ease of use and anticipated widespread availability of Digital Selective Calling equipment to the recreational boating community untrained in its uses pose potential problems or the Coast Guard. Absent some form of mandated training, such as the one or three day course required by the United Kingdom for similar equipment, the Coast Guard is highly concerned of the impact of DSC on its facilities and ability to determine the validity of a distress alert. Absent such ability, it must treat each call as a potential valid distress alert until determined otherwise. The only known mechanism is a licensing scheme that would have as a component completion of an appropriate short training course. The U. S. Coast Guard Auxiliary, U. S. Power Squadrons and others currently offer such courses. The evidence of such training would serve as the sole basis for granting a Voluntary Restricted License. The Coast Guard believes the Commission has the basis of such a system in place within its currently licensing structure and urges adoption of a Voluntary Restricted License as an enhancement to maritime safety.
- **6.** Coast Station Watches. In paragraph 113,, the Commission "requests further comments on MariTEL's and the USCG's respective proposals." These proposals were outlined in paragraph 111 and 112. The Coast Guard does not seek to impose any additional watch requirement on Coast Stations but rather to require Coast Stations during their hours of operation to provide such assistance as the Coast Guard may require to properly receive, acknowledge and process, a Digital Selective Calling distress alert. The Coast Guard does not consider this a new requirement but rather the extension to the newer technology of Digital Selective Calling to a coast station's existing requirement for a call heard on VHF FM Voice Channel 16.4 The Coast Guard further seeks to ensure that Coast Stations comply with the requirements outlined in Subpart W of the Commission's Rules regarding the handing distress alerts <sup>5</sup> and acknowledgements <sup>6</sup>.

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<sup>&</sup>lt;sup>4</sup> 47 C.F.R.§ 80.303 <sup>5</sup> 47 C.F.R.§ 80.1119

<sup>&</sup>lt;sup>6</sup> 47 C.F.R § 80.1117

- 7. Unattended Operations for Non-DSC Equipment. In paragraph 114, the Commission seeks comments on MariTEL's proposal to extend the provision of Section 80.179 of the Commission rules to permit such operation. The Coast Guard supports the Commission's concern regarding MariTEL's proposal, and absent assurances described below, supports its tentative conclusion that such operations be denied. While not seeking to impose any additional watch requirement on Coast Stations, the Coast Guard is highly concerned that acknowledgment of a distress alert without some manual intervention will lead to potential maritime causalities. Absent absolute assurance that a distress alert is properly acknowledged and relayed onwards to a Search and Rescue authority, such operation would engender a false sense of security to the party in distress.
- **8. Distress Frequency Signals.** In paragraph 115, the Commission seeks comment regarding the transmission of a signal on a distress frequency until specific provision of its rules provide for such a signal, the effects of this restriction on manufacturers, and finally whether such a rule would be consistent with the Communication Act. The Coast Guard does not desire to impede any improvement in communications equipment that enhances maritime safety. However, the Coast Guard operates the majority of the shore-based maritime safety infrastructure and must ensure that its equipment is able to process any distress or safety signal received. Absent regulation of the signal characteristics being transmitted, the high potential exists that an emission thought helpful by an individual manufacturer could unintentionally result in adverse effects to other vessels or the shore-based system. The Coast Guard encourages any safety enhancement however, we believe that such enhancements need to regulated.
- **9.** Use of Channels 75 and 76 for Port Operations. In paragraph 117, the Commission supports the Coast Guard's previous requests to designate VHF FM Channels 75 and 76 for Port Operations and amends the Table heading for Channel 22A. The Coast Guard supports final adoption and appreciates the Commissions action.

In paragraph 118, the Commission seeks comment concerning power restrictions, requirements for Channel 75 and 76 in newly type-certified radios, narrowbanding and grandfathering. The Coast Guard and the port operations centered maritime community, have expressed considerable concerns re channel availability in port areas and the potential maritime safety implications of channel overloading. Recently, the Commission took specific action to make another VHF FM channel available for port operations in the Los Angeles/Long Beach port area. The Coast Guard strongly supports a requirement that all new radios be required to have Channels 75/76 available. We believe that the power levels that the Commission has tentatively adopted are adequate to ensure protection for Channel 16. The intended uses of Channel 75/76 are such that power limitations similar to those allocable to Channel 13 are appropriate. The Commission has traditionally grandfathered existing

equipment for a considerable period of time after imposition of a new requirement and we support similar treatment of existing VHF FM equipment.

Channel 75 and Channel 76 should not be narrowbanded as such action would potentially affect interoperability between existing equipment and newly manufactured equipment.

**10. Digital Selective Calling Equipment.** In paragraph 119, the Commission sought comment "on the proposed amendment to Section 80.225 set forth in Annex C", and also invited comments that "address whether further amendments to Section 80.225 are warranted in light of continued revisions to DSC requirements being considered by both the ITU and IEC". The Coast Guard, while fully supportive of the changes proposed in Annex C, notes that the DSC standards changes being made by ITU and IEC accommodate these and other changes necessary to improve the operation of DSC<sup>7</sup>. IEC VHF DSC Class D Standard 62238, now complete, has been approved in the Committee Draft for Voting (CDV) stage and should be published in spring 2003. Recommendation ITU-R M.493-11 should be completed in September 2002 and published also in spring 2003.

The Coast Guard requests that significant changes to 80.225 be deferred until adoption of Rec. ITU-R M.493-11 and IEC 62238. Once adopted, we propose a further rulemaking be issued requiring that all DSC equipment meet Rec M.493 and that Class D DSC equipment meet IEC 62238, in place in RTCM Paper 56-95/SC101-STD. Certain manufacturers have indicated that the dual receiving functional requirement of IEC 62238 is costly and should not be required on all new VHF shipboard radios. We are sensitive to those concerns, and are willing to consider scanning as a possible alternative to that requirement in that rulemaking.

The Coast Guard plans to install a nationwide VHF DSC system<sup>8</sup> in coastal and inland waters beginning in October 2003, and to be completed in 2006, capable of receiving distress alerts that include vessel identity and accurate<sup>9</sup> position information. Once the system is in place, Coast Guard watchstanders are expected to receive thousands of DSC distress calls each year. A DSC distress alert without accurate position information is useless, especially if registration information is also inaccurate. To ensure that all DSC distress calls have accurate position information, the Coast Guard will be working with manufacturers and standards organizations to determine the practicality of providing an integral global position system (GPS) receiver capability in all DSC-equipped radios, or obtain accurate position information in some other way, in a manner similar to existing Commission

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<sup>9</sup> For DSC-equipped radios meeting IEC 62238 and connected to a GPS receiver, accuracy is typically 13m.

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<sup>&</sup>lt;sup>7</sup> These changes include higher precision in distress location information, elimination of unintentional and unnecessary alarms, means for ensuring alarms do not interfere with critical voice safety communications, simpler operation, and more precise definitions of DSC protocols. 
<sup>8</sup> National Distress & Response System Modernization Project. See http://www.uscg.mil/hq/g-a/ndrsmn/

regulations concerning wireless E911. When the Commission issues its further rulemaking concerning DSC requirements request above, the Coast Guard asks that provision of an integral GPS capability be considered in all DSC-equipped radios.

- 11. Distress Call and Message Transmission Procedures. In paragraph 120, the Commission states that its existing rules are consistent with current international procedures and that it is anticipated that the ITU will shortly address the issue. As the Commission is now aware, it is unlikely that the ITU will address this issue at the next World Radio Conference and it will thus be 2006 or later before the International Radio Regulations are changed regarding these matters. The Coast Guard strongly believes that many of these provisions may be deleted from the Commission's rules, and we will separately propose specific language to accomplish this.
- **12. INMARSAT-E EPIRBs.** In paragraph 121, the Commission invites parties to "address whether the conditions set forth above are necessary and sufficient, and may suggest additional conditions." We believe the conditions previously recommended and contained in this paragraph are sufficient to ensure that INMARSAT-E EPIRBs provide a level of maritime safety equivalent to currently authorized EPIRBs and that additional conditions are not required. The Coast Guard notes that the INMARSAT-E EPIRB has gained international acceptance and its use is expanding.
- **13. Small Passenger Vessels.** In paragraph 122, the Commission invited further comments regarding the classes of required DSC equipment, the time period authorized for compliance with the revised rules and whether or not DSC should be required on small passenger vessels given that DSC is GMDSS equipment.

The Coast Guard, as previously outlined, must ensure that its equipment is completely compatible with that installed on ships of all types. This can only be accomplished by ensuring that equipment meeting specified standards is installed. We urge the Commission to adopt our previous recommendations concerning equipment class standards.

The Coast Guard fully concurs with the suggested time periods for implementation of these newer requirements. The time delay between the establishment of Sea Areas A1 and A2 and required compliance will allow for the orderly procurement and installation of equipment, if necessary. We note that in the pending effective portion of this Report and Order that the Commission adopted the GMDSS Task Force's recommended time periods as they concern fishing vessels.

The Coast Guard strongly recommends that DSC equipment be required for small passenger vessels. We note the Commission has previously mandated that VHF FM radio equipment submitted for type acceptance (certification) after 17 June 1999 must be capable of DSC operation<sup>10</sup>. Further, we note the international trend away from voice radio guards towards a more effective and efficient system. IMO and other

<sup>&</sup>lt;sup>10</sup> 47 C.F.R.§ 80.203(n)

organizations have recognized the value of GMDSS techniques (suitably scaled for other than mandatory equipped GMDSS vessels) in enhancing maritime safety.

In paragraph 123, the Commission seeks comments on issues similar to those in paragraph 122, except applicable to high frequency equipment. The Coast Guard has a fully operational GMDSS A3 suite of equipment installed at its major communications facilities nationwide. The benefits of DSC techniques and the enhanced level of distress alert processing over existing voice radios are well understood and accepted. We believe the extension of a DSC requirement over a suitable phased in period will contribute to increased safety. Utilizing DSC techniques will enable the mariner to alert nearby shipping as well as shore facilities that have already ceased guarding SSB frequencies.

In paragraph 124, the Commission seeks further comment regarding the Coast Guard's recommendation that only INMARSAT A (existing units only) B, C, or M be permitted in lieu of SSB radios for applicable shipping. We repeat our recommendation noting that the INMARSAT equipment has the ability to preempt a channel to process a distress alert. With continuing increases in the numbers of INMARSAT terminals in use, the ability to ensure priority processing of distress alerts by seizing a channel will only grow. Mariners frequently have only one opportunity to transmit a distress alert. Systems that do not provide priority handling will engender a false sense of safety and should not be permitted.

In paragraph 125, the Commission seeks additional comments re the Coast Guard's recommendation concerning extension of battery requirements "including the navigation receiver". It seeks additional comment regarding position updating. We strongly urge adoption of our earlier recommendations. Ensuring that certain equipment has a reliable source of power during an emergency can only improve the safety of all concerned. Most vessels today carry some form of navigational equipment capable of being interfaced with a DSC equipped radio or a satellite system. Having updated position information will enable the Coast Guard to locate distressed mariners in a more timely manner. It will further enable the Coast Guard to better utilize its limited assets in a more efficient and fiscally responsible manner.

**14. GMDSS Rules.** In paragraph 126, the Commission seeks comments regarding the designation of a qualified person to perform **only** radio communications duties during a distress situation on board passenger ships in light of the requirements of Section 80.1073(b)(1) that an operator be designated to have **primary** responsibility. While we consider timely and reliable communications essential in any distress incident, in view of the potential number of people involved, we consider such communications even more critical in an incident involving greater numbers of people. An operator having primary responsibility can and frequently is called upon to perform other duties whereas a solely dedicated qualified operator would have no other duty.

In paragraph 127, the Commission seeks comment concerning the wording contained in Appendix C to be included in Section 80.1083 to comply with new SOLAS requirements. The proposed wording is sufficient to ensure compliance.

In paragraph 128, the Commission seeks comment concerning the wording contained in Appendix C to be included in Section 80.1085 to comply with new SOLAS requirements. The proposed wording is sufficient to ensure compliance.

- **15. Electronic Mail Requests.** In paragraph 129, the Commission seeks comment regarding the electronic mail submission of requests and reports required under Part 80 of its rules. The Coast Guard strongly supports the recommendation of the GMDSS Task Force. We believe that all required reports and requests should be authorized for submission by electronic mail. Such submissions would further the President's Management Agenda, ensure more timely reporting, ease existing paperwork burdens and potentially result in substantial cost savings.
- 16. Tabular Listings of Part 80 Frequencies. In paragraph 130, the Commission solicits comments regarding its current frequency listing practices. The Coast Guard considers the current method of listing carrier frequencies in the Part 80 tables and listing the assigned frequency on the license documents issues to licensees unsatisfactory. As other licensed personnel have replaced radio officers in performing communications functions, the potential for confusion and operation on an unauthorized frequency has increased. More modern equipment has somewhat compensated, however many vessels will continue to use older equipment. The tables in Part 80 and the frequencies listed on the station license should reflect both the carrier and assigned frequency.
- 17. Examination Requirements for GMDSS Radio Operators. In paragraph 131, the Commission solicits comments regarding the appropriate number of questions in the written examination for GMDSS Operators (Element 7) and the new restricted GMDSS Operators (Element 7R) certificates. The Coast Guard supports the increase in questions from 76 to 100 as proposed. Based on questions received by the Coast Guard during visits to ships and inquiries received by e-mail, a closer examination of GMDSS operating practices is warranted. We propose that the new element 7R be composed of not less than 50 questions applicable to the reduced requirements associated with the new restricted operators certificate. The Coast Guard will assist the Commission as it has in the past, upon request, in developing an appropriate question pool.

E.J. Brades

E. J. BRADY Spectrum Management Division Office of Communications Systems United States Coast Guard By direction of the Commandant